Home Standby - 7kW - 12kW - 15kW

Air-Cooled Gas Engine Generator Sets

Continuous Standby Power Rating

Model ASPAS1CCA007 - 7kW 60Hz
Model ASPAS1CCA012 - 12kW 60Hz
Model ASPAS1CCA015 - 15kW 60Hz

INCLUDES:

- **Automatic Transfer Switch with Built-In Emergency Load Center**
- **Pre-wired External Connection Box**
- **Flexible Fuel Line**
- **Composite Mounting Pad**
- **Pre-wired conduits**
- **Natural Gas or LP Gas Operation**
- **GFCI duplex outlet & 12Vdc outlet**
- **UL Listed to Canadian safety standards**
- **2 Year Limited Parts and Labor Warranty**

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FEATURES

❒ **INNOVATIVE DESIGN & PROTOTYPE TESTING** are key components of CARRIER'S success in "IMPROVING POWER BY DESIGN." But it doesn't stop there. Total commitment to component testing, reliability testing, environmental testing, destruction and life testing, plus testing to applicable CSA, NEMA, EGSA, and other standards, allows you to choose CARRIER with the confidence that these systems will provide superior performance.

❒ **TEST CRITERIA:**

- ✓ **PROTOTYPE TESTED**
- ✓ **SYSTEM TORSIONAL TESTED**
- ✓ **NEMA MG1-22 EVALUATION**
- ✓ **MOTOR STARTING ABILITY**

❒ **SOLID-STATE, FREQUENCY COMPENSATED VOLTAGE REGULATION.** This state-of-the-art power maximizing regulation system is standard on all CARRIER models. It provides optimized FAST RESPONSE to changing load conditions and MAXIMUM MOTOR STARTING CAPABILITY by electronically torque-matching the surge loads to the engine.

❒ **SINGLE SOURCE SERVICE RESPONSE** from CARRIER's dealer network provides parts and service know-how for the entire unit, from the engine to the smallest electronic component. You are never on your own when you own a CARRIER system.

❒ **CARRIER TRANSFER SWITCHES.** Long life and reliability are synonymous with CARRIER systems. One reason for this confidence is that the CARRIER product line includes its own transfer systems and controls for total system compatibility.

Carrier®

HOME STANDBY SPECIFICATIONS

Home Standby - 7kW - 12kW - 15kW

ENGINE	• Durable (OHVI) Design	Maximizes engine "breathing" for increased fuel efficiency. Cylinder walls run cooler, reducing oil consumption. Because heat is the primary cause of engine wear, the OHVI has a significantly longer life than competitive engines.
	• "Spiny-lok" cast iron cylinder walls	Rigid construction and added durability provide long engine life.
	• Electronic ignition, spark advance and compression release	These features combine to assure smooth, quick starting every time.
	• Full pressure lubrication system	Superior lubrication to all vital bearings means better performance, less maintenance and significantly longer engine life.
	• Low oil pressure shutdown system	Superior shutdown protection prevents catastrophic engine damage due to low oil.
	• High temperature shutdown	Prevents damage due to overheating.
GENERATOR	• Revolving field	Allows for smaller, light weight unit that operates 25% more efficiently than a revolving armature generator.
	• Skewed stator	Produces a smooth output waveform for compatibility with electronic equipment.
	• Displaced phase excitation	Maximizes motor starting capability. Provides more surge capability than brushless generator designs.
	• Automatic voltage regulation	Regulates the output voltage to ±2% prevents damaging voltage spikes.
	• UL 2200 Listed	For your safety
TRANSFER SWITCH	• Fully Automatic	Transfers your vital electrical loads to the energized source of power.
	• Remote Mounting	Mounts near your existing distribution panel for simple, low cost installation.
	• UL Listed	For your safety
MICROPROCESSOR CONTROL	• Manual/Auto/Off switch	Selects the operating mode.
	• Utility voltage sensing	Constantly monitors utility voltage, setpoints 60% dropout, 80% pick-up, of standard voltage.
	• Utility interrupt delay	Prevents nuisance start-ups of the engine, set point approximately 15 seconds.
	• Engine warm-up	Ensures engine is ready to assume the load, setpoint approximately 10 seconds.
	• Engine cool-down	Allows engine to cool prior to shutdown, setpoint approximately 1 minute.
	• Seven day exerciser	Operates engine to prevent oil seal drying and damage between power outages.
	• Timed Trickle Battery charger	Maintains battery amperage to insure starting.
	• Main Line Circuit Breaker	Protects generator from overload.
UNIT	• Weather protective enclosure	Ensures protection against mother nature. Hinged key locking roof panel for security. Electrostatically applied epoxy paint for durability.
	• Enclosed critical grade muffler	Quiet, critical grade muffler is mounted inside the unit to prevent injuries.
	• Small, compact, attractive	Makes for an easy, eye appealing installation.
INSTALLATION SYSTEM	• Pre-wired External Connection Box • 1' Flexible Fuel Line • Composite Mounting Pad • Pre-wired conduits • UL Listed wire nuts	Easy Installation - Virtually all hardware included, plus step-by-step photographed Installation Guide.

Home Standby - 7kW - 12kW - 15kW

GENERATOR	Model ASPAS1CCA007 (7kW)	Model ASPAS1CCA012 (12kW)	Model ASPAS1CCA015 (15kW)
Rated Maximum Continuous Power Capacity (LP)	7,000 Watts*	12,000 Watts*	15,000 Watts*
Rated Maximum Continuous Power Capacity (NG)	6,000 Watts*	12,000 Watts*	13,000 Watts*
Rated Voltage	120/240	120/240	120/240
Rated Maximum Continuous Load Current			
120 Volts	50.0 NG/58.3 LP	100.0 NG/100.0 LP	108.3 NG/125.0 LP
240 Volts	25.0 NG/29.2 LP	50.0 NG/ 50.0 LP	54.2 NG/62.5 LP
Main Line Circuit Breaker	30 Amp	50 Amp	65 Amp
Phase	1	1	1
Number of Rotor Poles	2	2	2
Rated AC Frequency	60Hz	60Hz	60Hz
Power Factor	1	1	1
Battery Requirement (not included)	Group 26 12 Volts and 350 Cold-cranking Amperes Minimum	Group 26 12 Volts and 525 Cold-cranking Amperes Minimum	Group 26 12 Volts and 525 Cold-cranking Amperes Minimum
Shipping Weight (lbs.) (Includes Transfer Switch)	375	470	487
Dimensions (L" x W" x H")	48 x 24 x 28-1/4	48 x 24 x 28-1/4	48 x 24 x 28-1/4

ENGINE	Model ASPAS1CCA007 (7kW)	Model ASPAS1CCA012 (12kW)	Model ASPAS1CCA015 (15kW)
Type of Engine	OHVI	OHVI V-TWIN	OHVI V-TWIN
Number of Cylinders	1	2	2
Rated Horsepower	14.5 @ 3,600 rpm	30 @ 3,600 rpm	30 @ 3,600 rpm
Displacement	410cc	992cc	992cc
Cylinder Block	Aluminum w/Cast Iron Sleeve	Aluminum w/Cast Iron Sleeve	Aluminum w/Cast Iron Sleeve
Valve Arrangement	Overhead Valve	Overhead Valve	Overhead Valve
Ignition System	Solid-state w/Magneto	Solid-state w/Magneto	Solid-state w/Magneto
Compression Ratio	8.6:1	9.5:1	9.5:1
Starter	12 Vdc	12 Vdc	12Vdc
Oil Capacity Including Filter	Approx. 1.5 Qts	Approx. 1.7 Qts.	Approx. 1.7 Qts.
Operating RPM	3,600	3,600	3,600
Fuel Consumption			
Natural Gas cu.ft./hr.			
1/2 Load	66	152	156
Full Load	119	215	220
Liquid Propane ft³/hr(gal/hr)			
1/2 Load	30(0.82)	56(1.53)	58(1.58)
Full Load	54(1.47)	76(2.08)	88(2.40)

Required fuel pressure to generator fuel inlet at all load ranges - 5 to 7 inches of water column for natural gas, 11 to 14 inches of water column for LP gas

CONTROLS	
Model Switch	
- AutoAutomatic Start on Utility failure/7 day exerciser	
- Off	Stops unit. Power is removed control and charger still operate
- Manual/Test (start)	Start with starter control, unit stays on. If utility fails, transfer to load takes place.
Engine Start Sequence	Cyclic cranking: 7 sec. on, 7 rest (90 sec. maximum duration)
Engine Warm-up	10 seconds
Engine Cool-Down	1 minute
Starter Lock-out	Starter cannot re-engage until 5 sec. after engine has stopped.
2.5 Amp Timed Trickle Battery Charger	Standard
Automatic Voltage Regulator w/Overvoltage Protection	Standard
Automatic Low Oil Pressure Shutdown	Standard
Overspeed Shutdown	Standard, 72Hz
High Temperature Shutdown	Standard
Overcrank Protection	Standard
Safety Fuse	Standard

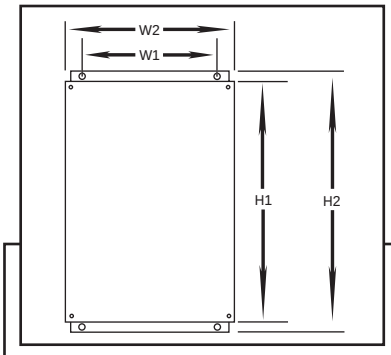
Rating definitions - Standby: Applicable for supplying emergency power for the duration of the utility power outage. No overload capability is available for this rating. (All ratings in accordance with BS5514, ISO3046 and DIN6271). Prime (Unlimited Running Time): Unit not recommended for prime power applications. Applicable for supplying electric power in lieu of commercially purchased power. Prime power is the maximum power available at variable load. A 10% overload capacity is available for 1 hour in 12 hours. (All ratings in accordance with BS5514, ISO3046, ISO8528 and DIN6271).
* Maximum wattage and current are subject to and limited by such factors as fuel Btu content, ambient temperature, altitude, engine power and condition, etc. Maximum power decreases about 3.5 percent for each 1,000 feet above sea level; and also will decrease about 1 percent for each 12° C (10° F) above 15.5° C (60°F).

Home Standby - 7kW - 12kW - 15kW

TRANSFER SWITCH & EMERGENCY LOAD CENTER	Model ASPAS1CCA007 (7kW)	Model ASPAS1CCA012 (12kW)	Model ASPAS1CCA015 (15kW)
No. of Poles	2	2	2
Current Rating (amps)	100	100	100
Voltage Rating (VAC)	250	250	250
Utility Voltage Monitor (fixed)			
-Pick-up	70%	70%	70%
-Dropout	60%	60%	60%
Return to Utility	approx. 13 sec	approx. 13 sec.	approx. 13 sec.
Exerciser weekly for 12 minutes	Standard	Standard	Standard
UL Listed	Standard	Standard	Standard
Dimensions (H" x W" x D")	26.5 x 12.5 x 7	26.5 x 12.5 x 7	26.5 x 12.5 x 7
Total of Pre-wired Circuits	8	10	12
No. 15A 120V	5	3	5
No. 20A 120V	1	3	3
No. 15A 240V	-	-	-
No. 20A 240V	-	1	1
No. 30A 240V	1	1	1
Circuit Breaker Protected Available RMS Symmetrical Fault Current @ 250 Volts	10,000	10,000	10,000

Transfer Switch Features

- Electrically operated, mechanically-held contacts for fast, positive connections.
- Rated for all classes of load, 100% equipment rated, both inductive and resistive.
- 2 pole, 250 VAC contactors.
- 160 millisecond transfer time.
- Dual coil design.
- Main contacts are silver plated or silver alloy to resist welding and sticking.
- NEMA 1 enclosure is standard on the 100 amp switch.

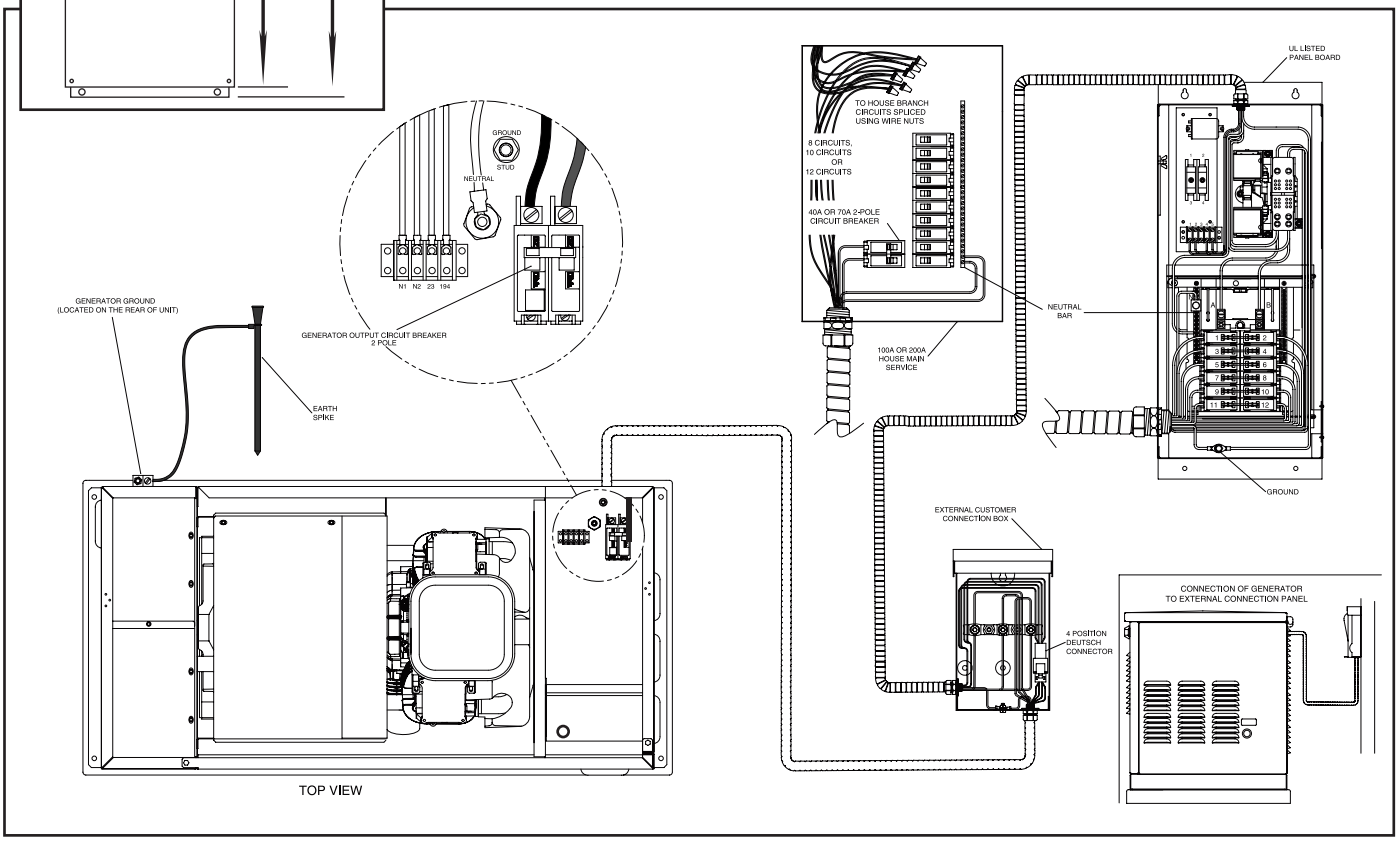


Mechanical Dimensions (in inches)

Current Rating	No. of Poles	Height H1	Height H2	Width W1	Width W2	Depth
100 UL Listed	2	26.5	29.25	8.14	12.5	7

Terminal Wire Ranges

ATS Rated Amps	Switch Terminal	Neutral Lug/Stud	Ground Lug
100A 2-Pole UL	1 x 1/0-12	1 x 3/8-16 Stud	1 x 2/0-14


GROUND STUD
NEUTRAL
N1 N2 23 194
GENERATOR OUTPUT CIRCUIT BREAKER 2 POLE
GENERATOR GROUND (LOCATED ON THE REAR OF UNIT)
EARTH SPIKE
TOP VIEW
TO HOUSE BRANCH CIRCUITS SPLICED USING WIRE NUTS
8 CIRCUITS, 10 CIRCUITS OR 12 CIRCUITS
40A OR 70A 2-POLE CIRCUIT BREAKER
100A OR 200A HOUSE MAIN SERVICE
UL LISTED PANEL BOARD
NEUTRAL BAR
GROUND
EXTERNAL CUSTOMER CONNECTION BOX
4 POSITION DEUTSCH CONNECTOR
CONNECTION OF GENERATOR TO EXTERNAL CONNECTION PANEL

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All specifications are subject to change without notice.